



18304 U.S. PTO

PTO/SB/05 (03-01)

Approved for use through 10/31/2002. OMB 0651-0032  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	HSJ920040067US1
First Inventor	Jinshan Li
Title	CURRENT-IN-THE -PLANE SPIN VALVE MAGNETORESISTIVE SENSOR WITH DUAL METAL OXIDE CAPPING LAYERS
Express Mail Label No.	EV 481497408 US

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages **17**]  
(preferred arrangement set forth below)
  - Descriptive title of the invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [ Total Sheets **3** ]
5. Oath or Declaration [ Total Pages **2** ]
  - a. ☒ Newly executed (original or copy)
  - b. ☐ Copy from a prior application (37 CFR 1.63 (d))  
(for continuation/divisional with Box 18 completed)
    - i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s)  
named in the prior application, see 37 CFR  
1.63(d)(2) and 1.33(b).
6. ☐ Application Data Sheet. See 37 CFR 1.76

## ADDRESS TO:

Assistant Commissioner for Patents  
Box Patent Application  
Washington, DC 20231

7. ☐ CD-ROM or CD-R in duplicate, large table or  
Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission  
(if applicable, all necessary)
  - a. ☐ Computer Readable Form (CRF)
  - b. Specification Sequence Listing on:
    - i. ☐ CD-ROM or CD-R (2 copies); or
    - ii. ☐ paper
  - c. ☐ Statements verifying identity of above copies

## ACCOMPANYING APPLICATION PARTS

9. ☒ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement ☒ Power of  
(when there is an assignee) Attorney
11. ☐ English Translation Document (if applicable)
12. ☒ Information Disclosure ☐ Copies of IDS  
Statement (IDS)/PTO-1449 Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
16. ☐ Nonpublication Request under 35 U.S.C. 122  
(b)(2)(B)(i). Applicant must attach form PTO/SB/35  
or its equivalent.
17. ☐ Other: .....

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.: \_\_\_\_\_ / \_\_\_\_\_

Prior application information:

Examiner: \_\_\_\_\_

Group Art Unit: \_\_\_\_\_

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

## 19. CORRESPONDENCE ADDRESS

☐ Customer Number or Bar Code Label (Insert Customer No. or Attach bar code label here) or ☒ Correspondence address below

Name	Thomas R. Berthold				
Address	18938 Congress Junction Ct.				
City	Saratoga	State	CA	Zip Code	95070
Country	USA	Telephone	(408) 396-8411	Fax	(408) 904-6605

Name (Print/Type)	Lewis L. Nunnelley	Registration No. (Attorney/Agent)	42,942
Signature		Date	4/14/04

Burden Hour Statement: This form is estimated to take 6.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

17510 U.S. PTO  
10/824701  
041404

041404

18304 U.S. PTO

PTO/SB/17 (10-01)

Approved for use through 07/31/2006. OMB 0651-0032  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# FEE TRANSMITTAL for FY 2004

Patent fees are subject to annual revision.

## Complete if Known

Application Number	
Filing Date	
First Named Inventor	Jinshan Li
Examiner Name	
Group Art Unit	
Attorney Docket No.	HSJ920040067US1

TOTAL AMOUNT OF PAYMENT (\$) 864.00

## METHOD OF PAYMENT

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:
- Deposit Account Number: 502587
- Deposit Account Name: Hitachi Global Storage Technologies
- ☒ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17
- ☐ Applicant claims small entity status. See 37 CFR 1.27
2. ☐ Payment Enclosed:
- ☐ Check ☐ Credit card ☐ Money Order ☐ Other

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	770.00
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	

SUBTOTAL (1) (\$) 770.00

### 2. EXTRA CLAIM FEES

Total Claims: 23

Independent Claims: 3

Multiple Dependent: 0

Extra Claims: 20\*\* = 3

Fee from below: 18.00

Fee Paid: 54.00

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
1202 18	2202 9	Claims in excess of 20
1201 86	2201 43	Independent claims in excess of 3
1203 290	2203 145	Multiple dependent claim, if not paid
1204 86	2204 43	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$) 54.00

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1051 130	205 65	Surcharge - late filing fee or oath	
1052 50	227 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	139 130	Non-English specification	
1812 2,520	147 2,520	For filing a request for <i>ex parte</i> reexamination	
1804 920*	112 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	113 1,840*	Requesting publication of SIR after Examiner action	
1251 110	215 55	Extension for reply within first month	
1252 420	216 205	Extension for reply within second month	
1253 950	217 465	Extension for reply within third month	
1254 1,480	218 725	Extension for reply within fourth month	
1255 2,010	228 985	Extension for reply within fifth month	
1401 330	219 160	Notice of Appeal	
1402 330	220 160	Filing a brief in support of an appeal	
1403 290	221 140	Request for oral hearing	
1451 1,510	138 1,510	Petition to institute a public use proceeding	
1452 110	240 55	Petition to revive - unavoidable	
1453 1,330	241 650	Petition to revive - unintentional	
1501 1,330	242 650	Utility issue fee (or reissue)	
1502 480	243 235	Design issue fee	
1503 640	244 310	Plant issue fee	
1460 130	122 130	Petitions to the Commissioner	
1807 50	123 50	Processing fee under 37 CFR 1.17(q)	
1806 180	126 180	Submission of Information Disclosure Stmt	
8021 40	581 40	Recording each patent assignment per property (times number of properties)	40
1809 770	246 370	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810 770	249 370	For each additional invention to be examined (37 CFR § 1.129(b))	
1801 770	279 375	Request for Continued Examination (RCE)	
1802 900	169 900	Request for expedited examination of a design application	

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 40.00

## SUBMITTED BY

Name (Print/Type) Lewis L. Nunnalley

Signature

Registration No. (Attorney/Agent)

42,942

## Complete (if applicable)

Telephone

(408) 717-6570

Date

4/14/04

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re the application of :

Jinshan Li et al. : Group Art Unit: Not Yet Assigned

Serial No. Not Yet Assigned : Examiner: Not Yet Assigned

For: "Current-In-The-Plane Spin Valve Magnetoresistive Sensor With Dual Metal  
Oxide Capping Layer"

Assistant Commissioner of Patents and Trademarks  
Alexandria, VA 22313-1450

**EXPRESS MAIL CERTIFICATE**

I hereby certify that the above paper/fee is being deposited with the United States Postal Service  
as \_Express Mail Post Office to Addressee\_ service in an envelope addressed to the Assistant  
Commissioner for Patents and Trademarks, Alexandria, VA 22313-1450 on April 14, 2004.

Express Mail NO.: EV 481497408 US

Person mailing paper/fee: Mary Lou Domenici

Signature

\_\_\_\_\_